

## **Executive Order VR-102-A**

### **Exhibit 3**

#### **Manufacturers Performance Standards and Specifications**

The performance standards and specifications contained in this Exhibit shall establish the minimum requirements to which vapor recovery components shall be manufactured, warranted, and offered for sale. These specifications are the minimum parameters by which CARB shall determine compliance with certification.

##### **Pressure/Vacuum Vent Valves for Storage Tank Vent Pipes**

1. Each Pressure/Vacuum Vent Valve (P/V Valve) shall be 100 percent performance tested at the factory. Each P/V Valve shall be shipped with a card or label stating the performance specifications listed below, and a statement that the valve was tested to, and met, these specifications.
  - a. The pressure settings for the P/V Valve
    - Positive pressure setting of  $3.0 \pm 0.5$  inches H<sub>2</sub>O.
    - Negative pressure setting of  $8.0 \pm 2.0$  inches H<sub>2</sub>O.
  - a. The leak rate for each P/V Valve, including connections, shall not exceed:
    - 0.05 CFH at 2.0 inches H<sub>2</sub>O.
    - 0.21 CFH at -4.0 inches H<sub>2</sub>O.
2. Each P/V Valve shall have permanently affixed to it a yellow or gold label with black lettering listing the positive and negative pressure settings specified above.

##### **Spill Container and Drain Valves**

1. Spill Containers and all internal components contained within a Spill Container shall be compatible with any and all fuel blends in common use in California, including seasonal changes, and approved for use as specified in Title 13, CCR, section 2260, et seq.
2. Each Spill Container Drain Valve shall be 100 percent performance tested at the factory. Each Spill Container shall have affixed to it a card or label stating the performance specifications listed below, and a statement that the valve was tested to, and met, the following specification.
  - a. The maximum allowable leakrate shall not exceed 0.17 CFH at 2.00 inches H<sub>2</sub>O

##### **Drop Tube Overfill Prevention Device**

1. Each Drop Tube Overfill Prevention Device shall be 100 percent performance tested at the factory. Each Drop Tube Overfill Prevention Device shall have affixed to it a card or label stating the performance specifications listed below, and a statement that the device was tested to, and met, the following specification.
  - a. The maximum allowable leakrate shall not exceed 0.17 CFH at 2.00 inches H<sub>2</sub>O

### **Rotatable Product and Vapor Recovery Adaptors**

1. The rotatable product and vapor recovery adaptors shall not leak.
2. Rotatable product and vapor recovery adaptors shall be capable of rotating at least 360 degrees when used in conjunction with any product or vapor recovery elbow used to connect to cargo tanks.
3. The vapor recovery adaptor cam and groove shall be manufactured in accordance with the standard described in Commercial Item Description, CID A-A-59326.
4. The product adaptor cam and groove shall be manufactured in accordance with the cam and groove standard specified by CARB as shown in Figure 3B.
5. Each product and vapor recovery adaptor shall be 100 percent performance tested at the factory. Each adaptor shall have affixed to it a card or label stating the performance specification listed below, and a statement that the adaptor was tested to, and met, the following specification.
  - a. The average static torque for the rotatable adaptor shall not exceed 108 pound-inch average static torque as determined in accordance with Static Torque of Rotatable Phase I Adaptors, Exhibit 4.

### **Product and Vapor Recovery Adaptor Dust Caps**

1. Dust caps shall not leak when installed on vapor recovery or product adaptors. Dust caps shall be factory tested to ensure compatibility with the cam and groove standards for rotatable adaptors as specified in Section 3 of CP-201.

**Figure 3A**

#### **Manufacturers Component Standards or Specifications**

<b>Component</b>	<b>Test Method</b>	<b>Standard or Specification</b>
Rotatable Phase I Adaptors	Exhibit 4	Minimum, 360-degree rotation Maximum, 108 pound-inch average static torque
Overfill Prevention Device	Exhibit 5	$\leq 0.17$ CFH at 2.00 inches H <sub>2</sub> O
Drain Valve Assembly	Exhibit 5	$\leq 0.17$ CFH at 2.00 inches H <sub>2</sub> O
Rotatable Vapor Recovery Adaptor	Micrometer	Cam and Groove Standard CID A-A-59326
Rotatable Product Adaptor	Micrometer	Cam and Groove Standard CARB Standard (Figure 3B)
UST, Fittings and Connections	TP-201.3	2.00 inches H <sub>2</sub> O - 5 minutes
Pressure/Vacuum Vent Valve	Exhibit 6	Positive Pressure: $3.0 \pm 0.5$ inches H <sub>2</sub> O Negative Pressure: $8.0 \pm 2.0$ inches H <sub>2</sub> O Leakrate: $\leq 0.05$ CFH at +2.0 inches H <sub>2</sub> O $\leq 0.21$ CFH at -4.0 inches H <sub>2</sub> O

Technical drawing of a mechanical part, likely a flange or end view of a shaft. The drawing shows a central cylindrical section with a diameter of 4.850 and a smaller inner section with a diameter of 4.250. The total height is 3.00 min. The drawing includes various dimensions and tolerances: 1.35 min. for the top section, .968 for a specific height, 30° for a chamfer, 63 for a radius, 125 for a radius, R.26 for a fillet, R.172 for a radius, 2R.250 for a radius, and R.12 for a radius. The drawing is a half-section view, indicated by a dashed centerline.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ± 0.5°